Fruit

The 2003 growing season was marked by persistently cool temperatures. March brought extremely cold weather to parts of Michigan, which negatively affected potential fruit production in some areas. June was an exceptionally cool month as well, and the lower temperatures inhibited pollination on many fruit crops. As fruit crops approached harvest, insect and disease pressure had been light, thanks to cool dry weather. Overall, the 2003 fruit crop showed significant improvement from 2002's weather devastated production, despite below average temperatures.

Apple growers experienced very good yields in 2003. There was a heavy king bloom set, and timely rains during the late growing season sizing. Coloring was enhanced on mid and late season varieties by light October frosts and sunny, cool days. The quality and finish of the harvested fruit were excellent.

Tart cherry yields in the northwest varied widely. There was significant frost damage from sub-zero temperatures at the beginning of March. It was, however, generally confined to the lower elevations of orchards. Some fruit was marked in the southwest, but yields were good. The crop in the west central was larger than anticipated. There was a long cool period after bloom, causing problems with pollination.

The sweet cherry crop was adversely affected by frost events in April and May and by sub-zero temperatures in mid-March. Buds were damaged or killed by the mid-March sub-zero temperatures. Almost all growers saw a reduction in crop size due to frost. Some growers had no production for the second straight year. In addition to lower yields, fruit cracking due to rain was prevalent on some varieties. Powdery mildew pressure was high during the season. Cherry fruit fly and plum curculio, major pests in Michigan cherries, were not problematic.

Peaches rebounded after a poor year in 2002. The trees overwintered fairly well, and a nice crop of peaches had set in the spring. A wet spring got peaches off to a good start. Many large growers thinned extensively to help promote fruit sizing. The weather turned dry in late June. The dry weather persisted through harvest and caused sizing problems and some fruit drop. Growers were unable to sell undersized fruit.

In blueberries, yield potential was reduced by freezing temperatures in late spring. Compounding the problem were dry conditions that persisted during July and August. Jersesys, the most common variety, were affected the most. Late season berries fared very well though. Overall, there was significant abandonment of bluberry acres.

Grape production varied based on variety and location throughout the State. Wine grapes in the northwest were affected by a cold snap in early March. This cold snap killed vines to the snow level. Most growers in northwest Michigan harvested little or no grapes in 2003. Grapes in the southwest were poised to have some of the highest yields on record when a hard frost affected the crop on October 1. Niagaras were not affected, as harvest was already complete when the frost hit. Wine grapes were harvested regardlessly, because of their high value. Harvest of Concords had just started when the frost hit. Harvesters worked around the clock in an attempt to salvage the crop. Fourteen thousand tons were left in the field.

Michigan strawberry growers reported fair yields that were hindered by a cool wet spring. Harvest of berries began in late May on covered rows and began in open patches in early June. Berry quality was excellent. July and August were dry, and some fields saw drought damage, especially after renovation. In September seasonal rains returned and helped to prepare strawberries for winter.

Fruit: Record highs and lows

Crop	Unit	Record high		Record low		Year estimates started
		Quantity	Year	Quantity	Year	
Apples	Million pounds	1,200	1999	53	1945	1889
Blueberries	Million pounds	87	1993	34	1992	1992
Cherries, sweet	Tons	37,500	1978	500	1945	1925
Cherries, tart	Million pounds	380	1964	15	2002	1925
Grapes	Tons	94,500	2003	4,200	1889	1889
Peaches	Million pounds	255	1945,1946	7.4	1918	1889
Pears	Tons	48,600	1964	1,400	2002	1889
Plums	Tons	25,000	1971	250	2002	1919
Strawberries	1,000 cwt	451	1940	50	2001	1928

Fruit: Acres harvested and value of production, 1999-2003

Item	Unit	1999	2000	2001	2002	2003
Acres harvested	1,000 acres	125	122	119	116	111
Value of production	1,000 dollars	249,763	218,999	219,418	150,732	268,807

Fruit: Acres, production, and value, 1999-2003

Fruit and Year	Bearing acres	Yield	Production		Price	Value of production
			Total	Utilized		
	Acres	*Pounds*	*Million pounds*	*Million pounds*	*Dollars per pound*	*1,000 dollars*
Apples						
1999	52,000	23,100	1,200	1,180	0.088	103,465
2000	48,500	16,500	800	795	0.093	74,065
2001	46,000	20,200	930	900	0.094	84,330
2002	43,500	12,000	520	515	0.124	64,110
2003	40,000	21,000	840	840	0.119	99,670
Blueberries [1]						
1999	16,600	4,220	70	70	0.781	54,660
2000	16,700	3,710	62	62	0.889	55,140
2001	16,800	4,170	70	70	0.712	49,840
2002	16,900	3,790	64	64	0.816	52,240
2003	15,900	3,900	62	62	1.020	63,120
Cherries, tart						
1999	28,100	6,580	185	185	0.228	42,134
2000	28,500	7,020	200	200	0.182	36,370
2001	28,000	10,600	297	242	0.184	44,412
2002	27,500	545	15	15	0.479	7,192
2003	27,000	5,700	154	154	0.376	57,938
Peaches						
1999	4,600	5,000	23.0	23.0	0.237	5,440
2000	4,800	9,900	47.5	45.5	0.249	11,340
2001	4,900	8,570	42.0	42.0	0.298	12,503
2002	5,000	2,800	14.0	14.0	0.318	4,452
2003	5,000	9,400	47.0	43.0	0.181	7,790
	Acres	*Tons*	*Tons*	*Tons*	*Dollars per ton*	*1,000 dollars*
Cherries, sweet						
1999	7,900	3.42	27,000	26,500	534	14,149
2000	8,000	2.63	21,000	21,000	490	10,290
2001	8,100	2.84	23,000	23,000	482	11,092
2002	8,100	0.33	2,700	2,600	855	2,222
2003	8,100	1.60	13,000	13,000	897	11,662
Grapes						
1999	12,200	6.14	74,900	74,900	281	21,083
2000	12,500	6.98	87,200	87,200	277	24,156
2001	12,300	2.35	28,900	28,500	355	10,110
2002	12,300	3.47	42,700	42,500	347	14,757
2003	12,600	7.50	94,500	80,500	308	24,800
Pears						
1999	850	5.88	5,000	4,900	265	1,300
2000	850	6.12	5,200	5,200	270	1,402
2001	850	5.41	4,600	3,900	297	1,160
2002	850	1.65	1,400	1,400	318	445
2003	800	6.00	4,800	4,300	259	1,112
Plums						
1999	900	4.44	4,000	3,750	299	1,120
2000	800	4.50	3,600	3,300	261	861
2001	800	4.50	3,600	3,600	358	1,289
2002	800	0.31	250	240	358	86
2003	800	4.50	3,600	3,600	355	1,278

[1] Harvested acres.

Apples: Stocks in cold and controlled atmosphere storage [1]

Month	Crop year				
	1999	2000	2001	2002	2003
	1,000 pounds	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*
October	525,756	416,923	484,244	237,062	438,345
November	534,061	343,731	392,432	216,805	389,636
December	382,346	294,088	343,380	173,503	316,003
January	357,336	238,013	261,696	110,495	279,373
February	264,771	215,482	199,318	99,044	222,665
March	193,012	160,481	178,996	83,016	169,470
April	127,684	104,512	78,303	22,467	87,284

[1] End-of-month stocks.

Apples: Utilization and price, 1999-2003

Year	Fresh market		Processing		Total	
	Quantity	Price per lb	Quantity	Price per lb	Quantity	Price per lb
	Million pounds	*Dollars*	*Million pounds*	*Dollars*	*Million pounds*	*Dollars*
1999	370	0.145	810	0.062	1,180	0.088
2000	260	0.147	535	0.067	795	0.093
2001	270	0.170	630	0.061	900	0.094
2002	150	0.223	365	0.084	515	0.124
2003	310	0.195	530	0.074	840	0.119

Apples, processing: Utilization and price, 1999-2003

Year	Canned		Frozen [1]		Juice and cider		Other	
	Quantity	Price per lb	Quantity	Price per lb	Quantity	Price per lb	Quantity	Price per lb
	Million pounds	*Dollars*	*Million pounds*	*Dollars*	*Million pounds*	*Dollars*	*Million pounds*	*Dollars*
1999	255	0.072	160	0.082	380	0.045	15	0.060
2000	190	0.078	120	0.085	215	0.048	10	0.083
2001	220	0.072	115	0.082	280	0.042	15	0.065
2002	135	0.100	90	0.105	135	0.052	5	0.122
2003	175	0.082	135	0.100	210	0.050	10	0.070

[1] Includes fresh slices.

Blueberries: Utilization and price, 1999-2003

Year	Production		Fresh market		Processed	
	Total	Utilized	Quantity	Price per pound	Quantity	Price per pound
	Million lbs	*Million lbs*	*Million lbs*	*Dollars*	*Million lbs*	*Dollars*
1999	70	70	18	1.130	52	0.660
2000	62	62	19	1.250	43	0.730
2001	70	70	21	1.090	49	0.550
2002	64	64	22	1.210	42	0.610
2003	62	62	24	1.300	38	0.840

Cherries, sweet: Production and utilization, 1999-2003

Year	Total production	Utilized production							
		Fresh		Canned		Brined		Other [1]	
		Quantity	Price per ton	Quantity	Price per ton	Quantity	Price per ton	Quantity	Price per ton
	Tons	*Tons*	*Dollars*	*Tons*	*Dollars*	*Tons*	*Dollars*	*Tons*	*Dollars*
1999	27,000	950	1,500	3,900	540	19,300	470	2,350	650
2000	21,000	600	1,680	900	500	15,000	430	4,500	528
2001	23,000	1,000	1,280	700	450	15,500	440	5,800	460
2002	2,700	200	2,540	280	1,000	1,700	630	420	864
2003	13,000	1,000	2,230	1,500	920	8,000	675	2,500	1,060

[1] Frozen, juice, etc.

Cherries, tart: Utilization, 1999-2003

Year	Production		Fresh market	Processed					
	Total	Utilized		Canned		Frozen		Other [1]	
				Quantity	Price per pound	Quantity	Price per pound	Quantity	Price per pound
	Million lbs	*Million lbs*	*Million lbs*	*Million lbs*	*Dollars*	*Million lbs*	*Dollars*	*Million lbs*	*Dollars*
1999	185	185	1.0	69.0	0.239	100	0.230	15.0	0.144
2000	200	200	1.0	80.0	0.187	110	0.181	9.0	0.106
2001	297	242	1.0	80.0	0.179	151	0.189	10.0	0.098
2002	15	15	0.1	6.5	0.460	8	0.500	0.4	0.340
2003	154	154	0.5	53.0	0.390	95	0.370	5.5	0.328

[1] Juice, wine, and dried.

Cherries, tart: Production by region, 1999-2003

Region	1999	2000	2001	2002	2003
	Million pounds	*Million pounds*	*Million pounds*	*Million pounds*	*Million pounds*
Northwest	108	109	183	3	98
West Central	48	71	84	4	37
Southwest and other	29	20	30	8	19
Michigan	185	200	297	15	154

Cherries, tart, frozen: Stocks in cold storage, 2000-2003, crop years

Month	East North Central region [1]				48 States total [2]			
	2000	2001	2002	2003	2000	2001	2002	2003
	1,000 pounds	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*
July	135,748	135,786	65,585	45,965	166,000	158,160	81,794	69,005
August	133,294	151,858	58,797	90,774	160,497	174,165	78,729	112,485
September	115,570	137,019	52,852	75,421	141,514	155,033	74,498	96,049
October	110,116	124,835	45,814	65,551	133,210	144,013	66,942	83,314
November	101,551	111,568	39,524	59,728	122,339	129,620	59,721	76,485
December	95,628	109,652	36,543	53,734	115,042	127,215	54,724	68,945
January	90,638	101,979	32,558	47,307	107,783	117,143	47,995	60,825
February	83,994	101,970	26,030	39,005	98,810	115,834	38,699	50,575
March	75,583	94,168	23,580	32,487	88,595	106,151	34,968	41,893
April	68,465	85,579	19,425	25,202	78,721	96,170	27,782	32,281
May	58,553	78,357	12,440	19,015	66,095	86,138	18,375	23,971
June	50,822	69,098	7,051	13,717	56,927	75,917	11,002	17,273

[1] Illinois, Indiana, Michigan, Ohio, and Wisconsin.
[2] Excluding Alaska and Hawaii.

Grapes: Processed utilization and value, 1999-2003

Year	Concord	Niagara	Other	Total		
				Utilized production	Price per ton	Value
	1,000 Tons	*1,000 Tons*	*1,000 Tons*	*1,000 Tons*	*Dollars*	*1,000 dollars*
1999	57.3	14.4	2.7	74.4	278	20,683
2000	64.5	19.1	3.1	86.7	274	23,756
2001	19.0	7.0	2.2	28.2	350	9,870
2002	25.3	13.9	3.0	42.2	344	14,517
2003	51.0	27.0	2.0	80.0	305	24,400

Grapes: Processed for wine by category, 1999-2003 [1]

Year	Hybrids		Vinifera		Other		Total		
	Quantity	Price per ton	Quantity	Price per ton	Quantity	Price per ton	Quantity	Price per ton	Value of production
	Tons	*Dollars*	*Tons*	*Dollars*	*Tons*	*Dollars*	*Tons*	*Dollars*	*1,000 dollars*
1999							2,900	700	2,030
2000							3,100	825	2,558
2001							2,200	940	2,068
2002	1,300	425	1,650	1,330	50	250	3,000	920	2,760
2003	900	600	1,050	1,200	50	200	2,000	905	1,810

[1] Quantity and price per ton by category first published in 2002.

Peaches: Utilization and value, 2000-2003

Year	Fresh Market			Processing		
	Production	Price per pound	Value of production	Production	Price per ton	Value of production
	Million lbs	*Dollars*	*1,000 dollars*	*Million lbs*	*Dollars*	*1,000 dollars*
1999	11.0	0.320	3,520	12.0	320	1,920
2000	29.5	0.280	8,260	16.0	385	3,080
2001	27.0	0.375	10,125	15.0	317	2,378
2002	10.6	0.370	3,922	3.4	312	530
2003	25.0	0.200	5,000	18.0	310	2,790

Plums: Utilization and value, 1999-2003

Year	Fresh Market			Processing		
	Production	Price per Ton	Value of production	Production	Price per ton	Value of production
	Tons	*Dollars*	*1,000 dollars*	*Tons*	*Dollars*	*1,000 dollars*
1999	1,100	440	484	2,650	240	636
2000	1,250	270	338	2,050	255	523
2001	1,800	442	796	1,800	274	493
2002	60	600	36	180	278	50
2003	1,100	480	528	2,500	300	750

Strawberries: Acres, production and value, 1999-2003

Year	Total	Harvested	Yield	Production	Price per cwt	Value of production
	Acres	*Acres*	*Cwt*	*1,000 cwt*	*Dollars*	*1,000 dollars*
1999	1,400	1,400	64	90	71.20	6,412
2000	1,200	1,200	69	83	74.00	6,145
2001	1,000	900	56	50	93.60	4,682
2002	1,300	1,200	47	56	93.40	5,228
2003	1,300	1,200	53	63	100.00	6,320

Strawberries: Utilization and value, 1999-2003

Year	Fresh Market			Processing		
	Production	Price per cwt	Value of production	Production	Price per cwt	Value of production
	1,000 cwt	*Dollars*	*1,000 dollars*	*1,000 cwt*	*Dollars*	*1,000 dollars*
1999	71	78.00	5,538	19	46.00	874
2000	66	81.00	5,346	17	47.00	799
2001	44	100.00	4,400	6	47.00	282
2002	51	98.00	4,998	5	46.00	230
2003	58	105.00	6,090	5	46.00	230

Refrigerated warehouses: Number and capacity, October 1, 2002 [1]

Type	Number	Usable freezer space	Usable cooler space	Controlled atmosphere
		1,000 cu ft	*1,000 cu ft*	*1,000 bushels*
Apple	179		30,806	7,795
General-public	25	45,740	5,745	
General-private and semi-private	20	12,127	5,720	

[1] Conducted biennially.